

WHAT IS CLAIMED IS:

1. A purge system for a product container in which a container-side port formed in the product container and a stand-side port formed in a stand on
5 which the container is placed are substantially in contact with each other via a sealing member, and a gas line for performing at least one of gas supply and evacuation with respect to an interior of the container is formed between the stand-side port and
10 the container-side port,

wherein the sealing member has: a ring-shaped main body portion to be fixed to an opening end portion of a stand-side port opening so as to surround an outer periphery of the stand-side port
15 opening; a first lip portion substantially extending from an inner peripheral portion of the ring-shaped main body portion toward the other opening end portion different from the opening end portion where the main body portion is fixed; a second lip portion
20 substantially extending from an outer peripheral portion of the ring-shaped main body portion toward the other opening end portion different from the opening end portion where the main body portion is fixed; and a hole provided in the main body portion
25 between the first lip portion and the second lip portion so as to extend to an end surface where the first lip portion and the second lip portion are not

formed, and

wherein the stand has a gas flow path communicating with the hole and connected to an exhaust system.

5

2. A purge system for a product container according to claim 1, wherein the first lip portion and the second lip portion are adapted to be deformed in directions which are different from each other and
10 in which the first lip portion and the second lip portion respectively extend, according to a pressure in a space insulated from an ambient environment by the sealing member.

15 3. A purge system for a product container in which a container-side port formed in the product container and a stand-side port formed in a stand on which the container is placed are substantially in contact with each other via a sealing member, and a
20 gas line for performing at least one of gas supply and evacuation with respect to an interior of the container is formed between the stand-side port and the container-side port,

wherein the sealing member has: a ring-shaped
25 main body portion to be fixed to an opening end portion of a container-side port opening so as to surround an outer periphery of the opening; a first

lip portion substantially extending from an inner peripheral portion of the ring-shaped main body portion toward the other opening end portion different from the opening end portion where the main
5 body portion is fixed; and a second lip portion substantially extending from an outer peripheral portion of the ring-shaped main body portion toward the other opening end portion different from the opening end portion where the main body portion is
10 fixed, and

wherein the stand has a gas flow path which communicates with a portion formed between the first lip portion and the second lip portion when the stand-side port and the container-side port are held
15 in contact with each other and which is connected to an exhaust system.

4. A purge system for a product container according to claim 3, wherein the first lip portion
20 and the second lip portion are adapted to be deformed in directions which are different from each other and in which the first lip portion and the second lip portion respectively extend, according to a pressure in a space insulated from an ambient environment by
25 the sealing member.

5. An interface seal device which, when

connecting together a first space and a second space which are insulated from an ambient environment, which are capable of maintaining an internal pressure different from a pressure of the ambient environment, and which each have an opening, is arranged between an opening-forming surface of the first space and an opening-forming surface of the second space to thereby insulate the first space and the second space from the ambient environment, comprising:

10 a ring-shaped main body portion to be fixed to one of the opening-forming surface of the first space and the opening-forming surface of the second space so as to surround an outer periphery of the opening;

15 a first lip portion substantially extending from an inner peripheral portion of the ring-shaped main body portion toward the other opening-forming surface different from the opening-forming surface where the main body portion is fixed; and

20 a second lip portion substantially extending from an outer peripheral portion of the ring-shaped main body portion toward the other opening-forming surface different from the opening-forming surface where the main body portion is fixed,

25 wherein the first lip portion and the second lip portion are adapted to be deformed in directions which are different from each other and in which the first lip portion and the second lip portion

respectively extend, according to pressures in the first space and the second space.

6. An interface seal device according to claim
5 5, wherein the main body portion has a hole provided between the first lip portion and the second lip portion so as to extend to an end surface where the first lip portion and the second lip portion are not formed.

10

7. An interface seal device according to claim
5, wherein the first lip portion has a configuration whose inner diameter gradually diminishes as the first lip portion is departed from the main body
15 portion, and wherein the second lip portion has a configuration whose inner diameter gradually increases as the second lip portion is departed from the main body portion.

20

8. A sealing member which, when connecting together a first space and a second space which are insulated from an ambient environment, which are capable of maintaining an internal pressure different from a pressure of the ambient environment, and which
25 each have an opening, is arranged between an opening-forming surface of the first space and an opening-forming surface of the second space to thereby

insulate the first space and the second space from the ambient environment, comprising:

5 a ring-shaped main body portion to be fixed to one of the opening-forming surface of the first space and the opening-forming surface of the second space so as to surround an outer periphery of the opening;

10 a first lip portion substantially extending from an inner peripheral portion of the ring-shaped main body portion toward the other opening-forming surface different from the opening-forming surface where the main body portion is fixed; and

15 a second lip portion substantially extending from an outer peripheral portion of the ring-shaped main body portion toward the other opening-forming surface different from the opening-forming surface where the main body portion is fixed,

20 wherein the main body portion has a hole provided between the first lip portion and the second lip portion so as to extend to an end surface where the first lip portion and the second lip portion are not formed.